b) obtaining a solution or suspension of plant cuticular and epicuticular materials, thereby producing the antiviral preparation, wherein the plant or plant part is selected from the group consisting of Malus, Pyrus, Lycopersicon, Brassica, Cucumis, Prunus, Persea, Vaccinium, Arctostaphylos, Olea, Nicotianum, Quercus, Eucalyptus, Rhododendron, Ilex, Eriobotrya, Salix, Copernicia, Euphorbia, Pedilanthus, Syagrus, Cocos, Attalea, Stipa, Glyceria, Saccharum, Myrica, Rhus, Sapium, Ceroxylon, Linum, Agave, Cannabis, Raphia, Coccus, Ligustrum, Fraxinus, Benincasa, Ricinus, Buxus, Mesembryanthemum, Rubus and Melaleuca.

Please cancel claims 1-4 and 10-18, without prejudice or disclaimer.

REMARKS

Claims 1-23, 25-35, and 37-39 were pending in the instant application. Claims 5-10, 19-23, 25-35, and 37-39 stand variously rejected under 35 U.S.C. §112, first paragraph, 35 U.S.C. §102, and/or 35 U.S.C. §103. By the foregoing amendment, claim 5 is being amended. The amendment does not include new matter. Claims 1-4 and 11-18, which were previously withdrawn in response to a restriction requirement, are being cancelled, without prejudice or disclaimer. Therefore, claims 5-10, 19-23, 25-35, and 37-39 will be pending upon entry of the instant amendments.

The accompanying amendment is proper under 37 C.F.R. § 1.116 practice and may be entered by the examiner because it does not present new issues requiring further consideration or search, and because it reduces the outstanding issues, thereby placing the application in better condition for allowance or appeal.

Attached hereto, as Appendix A, is a marked-up version of the amendment presented herein, in accordance with the requirements of 37 C.F.R. §1.121. In addition, for the Examiner's convenience, a complete set of claims pending upon entry of the instant amendment is attached as Appendix B.

¹ Applicants do not intend by these amendments to abandon the scope of any claim as originally filed or later presented, and reserve the right to pursue such claims in continuing applications.

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Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, she is respectfully invited to contact the undersigned attorney at the indicated telephone number.

Respectfully submitted,

Marshall, Gerstein & Borun

April 16, 2003

By:

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APPENDIX A

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claim 5 as follows:

- 5. (Thrice Amended) A method for producing a preparation possessing antiviral activity comprising substances obtained from cuticular or epicuticular layers external to an epidermis of a plant or plant part, the method comprising:
- a) exposing the plant or plant part to a solvent under conditions sufficient to solubilize materials in the cuticular and epicuticular layers of the plant, while leaving cells and tissues internal to the epidermis substantially unaffected; and
- b) obtaining a solution or suspension of plant cuticular and epicuticular materials, thereby producing the antiviral preparation, wherein the plant or plant part is selected from the group consisting of Malus, Pyrus, [Citrus,] Lycopersicon, Brassica, Cucumis, Prunus, Persea, Vaccinium, Arctostaphylos, Olea, Nicotianum, Quercus, Eucalyptus, Rhododendron, Ilex, Eriobotrya, Salix, Copernicia, Euphorbia, Pedilanthus, Syagrus, Cocos, Attalea, Stipa, Glyceria, Saccharum, Myrica, Rhus, Sapium, Ceroxylon, Linum, Agave, Cannabis, Raphia, Coccus, Ligustrum, Fraxinus, Benincasa, Ricinus, Buxus, Mesembryanthemum, Rubus and Melaleuca.

APPENDIX B

CLEAN COPY OF ALL PENDING CLAIMS UPON ENTRY OF INSTANT AMENDMENT

- 5. (Thrice Amended) A method for producing a preparation possessing antiviral activity comprising substances obtained from cuticular or epicuticular layers external to an epidermis of a plant or plant part, the method comprising:
- a) exposing the plant or plant part to a solvent under conditions sufficient to solubilize materials in the cuticular and epicuticular layers of the plant, while leaving cells and tissues internal to the epidermis substantially unaffected; and
- b) obtaining a solution or suspension of plant cuticular and epicuticular materials, thereby producing the antiviral preparation, wherein the plant or plant part is selected from the group consisting of Malus, Pyrus, Lycopersicon, Brassica, Cucumis, Prunus, Persea, Vaccinium, Arctostaphylos, Olea, Nicotianum, Quercus, Eucalyptus, Rhododendron, Ilex, Eriobotrya, Salix, Copernicia, Euphorbia, Pedilanthus, Syagrus, Cocos, Attalea, Stipa, Glyceria, Saccharum, Myrica, Rhus, Sapium, Ceroxylon, Linum, Agave, Cannabis, Raphia, Coccus, Ligustrum, Fraxinus, Benincasa, Ricinus, Buxus, Mesembryanthemum, Rubus and Melaleuca.
- 6. The method of claim 5 wherein the solvent comprises one or more ingredients selected from the group consisting of hexane, chloroform, dichloromethane, heptane, ether, petrolether, t-butyl ether, DMSO, supercritical fluids and carbon dioxide.
- 7. The method of claim 5 wherein the step of exposing comprises dipping the plant or plant part into the solvent.
- 8. The method of claim 5 wherein the step of exposing comprises spraying the plant or plant part with the solvent.
- 9. The method of claim 19 wherein the removal of the solvent is performed by a method selected from the group consisting of aspiration, static evaporation, heating, centrifugal evaporation, rotary evaporation, vortex evaporation, lyophilization, liquid-liquid separation, solid-liquid separation and precipitation.

- 10. An antiviral preparation prepared by the method of claim 5.
- 19. The method according to claim 5 further comprising removing the solvent.
- 20. The method according to claim 19 further comprising redissolving the antiviral preparation in a biologically compatible medium.
- 21. The method according to claim 5 further comprising clarifying the solution or suspension of plant cuticular and epicuticular materials.
- 22. The method according to claim 5 further comprising formulating the antiviral preparation into a pharmaceutical composition.
- 23. The method according to claim 5 further comprising formulating the antiviral preparation into a nutraceutical composition.
- 25. The method according to claim 5 wherein the antiviral activity is selected from the group consisting of an anti-human immunodeficiency virus activity, an anti-herpesvirus activity, an anti-influenza virus activity, an anti-rhinovirus activity, an anti-poliovirus activity, an anti-hepadnavirus activity, an anti-cytomegalovirus activity, an anti-measles virus activity, an anti-parainfluenza virus activity, an anti-vesicular stomatitis virus activity, an anti-vaccinia virus activity, an anti-encephalitis virus activity and an anti-African Swine Fever virus activity.
- 26. The method according to claim 5 wherein the anti-herpesvirus activity is anti-HSV activity.
- 27. The method according to claim 26 wherein the plant or plant part is selected from the group consisting of *Malus, Pyrus, Citrus, Lycopersicon, Prunus, Eriobotrya, Copernicia, Ceroxylon* and *Persea*.
- 28. The method according to claim 5 wherein the antiviral activity is anti-HIV activity.
- 29. The method according to claim 28 wherein the plant or plant part is selected from the group consisting of *Prunus*, *Eriobotrya*, *Copernicia*, *Ceroxylon* and *Salix*.

- 30. The method according to claim 5 wherein the antiviral activity is antiinfluenza activity.
- 31. The method according to claim 30 wherein the plant or plant part is selected from the group consisting of *Malus*, *Lycopersicon*, *Brassica* and *Persea*.
- 32. The method according to claim 5 wherein the plant or plant part is an agricultural or horticultural plant.
- 33. The method according to claim 32 wherein the agricultural or horticultural plant is selected from the group consisting of *Malus, Pyrus, Citrus, Lycopersicon, Brassica, Persea, Copernicia, Ceroxylon,* and *Eriobotrya*.
 - 34. The method of claim 5 wherein the plant or plant part is *Malus*.
 - 35. The method of claim 5 wherein the plant or plant part is *Lycopersicon*.
- 37. The method of claim 5 wherein the plant or plant part is exposed to a solvent from about three minutes to about five minutes.
- 38. The method of claim 37 wherein the plant or plant part is exposed to a room temperature solvent.
 - 39. The method of claim 5 wherein the plant or plant part is fruit peel.